

LESSON 3G—NARRATIVE: WHO IS AN ARCHAEOLOGIST WHO STUDIES ANCIENT TECHNOLOGY?

Ann M. Johnson is an archaeologist who studies ancient technology.

Dr. Ann M. Johnson is an archaeologist who studies ancient technology—the manufacture and use of material objects needed in daily life by people of the past. Ann’s specialty is the study of prehistoric pottery, or ceramics, of the Northern Plains. When Ann was in graduate school, Montana prehistoric ceramics was an area no other student was studying, and she found the opportunity to make a contribution in the study of prehistoric ceramics attractive. The first Northern Plains prehistoric pottery found by archaeologists dates from about A.D. 400.

Ann directs her research at a range of cultures, from the group of prehistoric people just before pottery appeared, 1000 B.C., to the people at the beginning of the historic period. She also studies historic Native American sites so that she can more fully interpret the past.

When Ann studies pottery, she is first interested in the technology of a piece. She seeks clues about how it was made, where the clay was obtained, and how the pot was decorated. Then she focuses on the group of prehistoric people who made this particular type of pottery. Pottery tends to be culturally characteristic, that is, pots have qualities that help identify different prehistoric groups.

Ann states that the best way to study pottery is to examine it in person, and to look at a great deal of it. Pictures and words do not fully convey

the qualities that distinguish cultures and time periods. Someone who analyzes pottery—a ceramic analyst—also needs to keep good records and notes on the collections she has viewed. Similarities and differences in pottery translate into similarities and differences in cultures. Records and notes are then used to compare to collections viewed at a later time.

Ann was interested in archaeology at a young age and did her first field-work when she was eleven. She joined a field crew testing prehistoric sites near Havre, Montana. Ann attended elementary and secondary schools in Kalispell, Montana. Her post-secondary education was at the University of Montana and the University of Missouri. While in graduate school, she published her first archaeological article and worked on archaeological inventory and testing crews.

Ann spent a couple years working with the Colorado State Archaeologist’s Office and the Bureau of Land Management. She joined the National Park Service in 1980, and she has been the archaeologist for Yellowstone National Park since 1995. She says that the easiest part of her job is getting up and going to work, because she loves where she works and what she does! Ann says the most difficult part of her job is finding time to write articles presenting the information she has learned from her investigations. Her other work, with deadlines to meet, often takes priority over her writing.

As she studies the past, Ann is most intrigued by the relationships between the groups of people who inhabited the plains. There were two contrasting prehistoric lifestyles. One group were migratory, having no permanent home. They moved seasonally, gathering plant foods and hunting animals, primarily bison. The other group were villagers, who had permanent homes. They cultivated gardens with corn, beans, squash, and sunflowers, and they supplemented their agricultural products with summer hunts. These summer hunts would bring villagers west from the Dakotas to the eastern Montana plains, where the non-village groups lived. When evidence of contact between the two groups exists, their encounters were sometimes peaceful, and sometimes they were not.

Ann notes that the villagers made large numbers of excellent ceramics, while the non-village groups only occasionally made a few pots. Working for the National Park Service has given her the opportunity to study two sites in Yellowstone National Park known to contain prehistoric ceramics. These ceramics are identified as Intermountain ware and are found in Montana, Wyoming, and Idaho. Both Yellowstone ceramic sites are believed to represent prehistoric Shoshone Indians, a non-village people.

One of Ann's favorite Montana sites is Wahkpa Chu'gn, near Havre, where she did her first fieldwork. It is a large buffalo jump with processing areas and camp areas. Wahkpa Chu'gn was used from about A.D. 400 to 1600 by a series of different peoples. It has

never been vandalized, making it a valuable archaeological site. It also contains all the activities associated with the buffalo jump, allowing archaeologists to interpret the entire picture of how early people lived. The Wahkpa Chu'gn site is open to the public to visit.

Another of Ann's favorite sites is Nollmeyer, a village near Sidney, Montana. People at Nollmeyer moved from northern South Dakota to eastern Montana and built earth homes. They left behind many tools, pottery, and animal bones from their meals. These people also built a fortification ditch around their village. It must have been because their migratory neighbors were not friendly!

Ann has worked at sites in North and South Dakota, Montana, Colorado, Wyoming, and Missouri. An extensive project she worked on was in the mountain foothills outside of Denver, Colorado. During this project, Ann and her co-workers documented seven thousand years of prehistory with a series of rock shelter tests. Ann has also worked at sites in Saskatchewan, Canada, and Colombia, South America.

Ann would most like to find a Montana kiln site, a location where prehistoric pottery was fired to change it from dried clay to ceramics. If such a site were carefully excavated, much could be learned about how non-village people made pottery. She would study similarities and differences to the way village people made their pottery.

Ann says that thousands of sites are destroyed by development, erosion, and vandalism each day. Thus, the total number of sites is decreasing. She believes that, in the future, archaeolo-

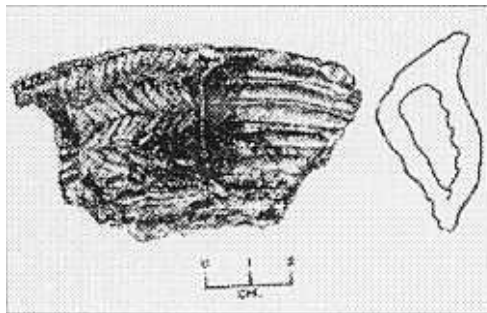
gists will investigate more sites through the use and reanalysis of museum collections.

Ann states that archaeologists should know a little about many subjects. If you are interested in the field of archaeology, it is helpful to have knowledge of botany and animal anatomy to identify plants and bones. Geography and geology assist in understanding the location of sites and stones used as tools. Math, statistics, biology, ecology, history, physics, earth science, and chemistry are essential courses. It is important to be able to read and write well. Computer skills are valuable. Students should also learn about the scientific method of how to formulate and test hypotheses.

Ann's message—as you learn more about archaeology—is: "Please remember that knowing where artifacts come from, the site and the location within the site, is very important to the proper interpretation of those artifacts."

When Ann is not studying pottery, she enjoys gardening and photography. Her family includes two sisters, a lawyer and a medical doctor. Students interested in archaeology may contact Ann at:

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Prehistoric pottery is not an artifact commonly found in Montana. When it does appear, it often reflects long-distance travel or trade between ancient groups. After studying this piece of pottery from Meagher County—a rim sherd with a handle—Ann Johnson concluded that it is most like pottery from the Middle Missouri area of South Dakota made between A.D. 1450 and A.D. 1700.



Since 1995, Ann Johnson has been the archaeologist for Yellowstone National Park. Ann began her career with the National Park Service in 1980.